(U.S. Patent No. 5,479,407; hereafter "Ko"). Applicant respectfully traverses the prior art rejections.

In the Amendment filed September 18, 2004, Applicant argued that claimed invention would not have been anticipated by or rendered obvious in view of Mansour because the cited reference does not teach or suggest detecting faulty operation which leads to the network being split into at least two network portions which can no longer communicate with each other via any of the trunks of the private communications network, as required by independent claim 1. Instead, the teachings of Mansour are limited to the case where a node or link becomes inoperable and traffic is rerouted via other existing nodes/links of network. In other words, Mansour's network never becomes split when a node or link fails since the nodes (switching offices 100-1 through 100-13) can always communicate with each other through other existing nodes or links of network.

In response the September 18, 2004 Amendment, the Examiner now cites Figure 2 and column 2, lines 58-59 of Hamami for allegedly disclosing "detecting faulty operation that leads to the network becoming split into at least two network portions which can no longer communicate with each other via any of the trunks of the private communications network". Further, the Examiner asserts that "[i]t would have been obvious ... to modify Masour to detect faulty operation that leads to the network becoming split into at least two network portions which can no longer communicate with each other via any of the trunks of the private communications network as taught by Hamami in order to avoid data loss."

Applicant respectfully submits that it is quite clear neither Mansour nor Hamami teach or suggest detecting faulty operation that leads to the network becoming split into at least two network portions which can no longer communicate with each other via any of the trunks of the private communications network, as required by claim 1.

Hamami discloses a method for implementing redundancy of both links and ports between two ATM switches. As shown in Figures 1 and 2, a first ATM switch 22 and a second ATM switch 20 are provided with a redundant link connection which includes two separate parallel communication links, a main link 60 and a backup link 62, connected between separate ports on each of the switches 20 and 22. Two virtual circuits are setup between the backup link ports, a direct virtual circuit directed over the backup link and an indirect virtual circuit that is routed over the main link via the main link ports. A virtual circuit is also setup over the main link for regular data traffic. In addition, a standby virtual circuit is setup over the backup link but is placed in standby until the occurrence of a failure. Until a failure occurs, traffic normally proceeds over the main link while the backup link ports transmit keep alive messages to each other over the indirect virtual circuit that is routed over the main link. When a failure of the main link 60 is detected, either one or both of the backup link ports detects the failure. The data traffic is then switched from the main link 60 to the backup link 62.

Accordingly, Hamami simply discloses providing a redundancy scheme in which the ATM switches are always connected via at one of two identical links. In other words, if a main link fails in Hamami's network, data traffic is switched to the (previously established) backup link. Thus, the Hamami's network is never split into two network portions which can no longer

communicate with each other via any of the trunks of the network, as required by independent claim 1.

Similarly, as discussed in the September 20, 2004 Amendment, Mansour discloses a network alternate routing arrangement wherein traffic is restored to service by establishing a number of orders of connectivity each formed from spare link capacity, in which each succeeding order of connectivity represents the shortest loop around a preceding order of connectivity. As shown in Figure 1, when the link 103 connecting nodes 100-2 and 100-3 fails, traffic between service-end nodes 100-1 and 100-5, which are assumed to be the respective source and destination of the traffic carried by failed link 103, is re-routed between nodes 100-1 and 100-4 via links 106 and 107 and node 100-6.

On the other hand, with reference to the figure, the present invention is directed to the case where a private communications network R0, which includes nodes 1-9 interconnected by trunks $A_{i,j}$, is split into a first network portion R1 and a second network portion R2 due to faulty operation of the trunk $A_{1,4}$. The two network portions R1 and R2 are disjoint in that none of the nodes of the first network portion R1 can communicate directly, i.e., over a trunk available in the network in normal operation, with any of the nodes in the second network portion R2. When the network split is detected and data is to be transmitted between one of the nodes in the first network portion R1 and one of the nodes in the second network portion R2, a dynamic access $AD_{3,4}$ is set up. This dynamic access serves to carry digital signaling signals between the two portions R1 and R2 of the network R0. The signaling channels can be transmitted using various different media including modems for converting digital and/or analog signals can have been

installed beforehand in nodes 3 and 4, links of the Ethernet type, a B channel in an access to a communications circuit, basic accesses, or indeed primary accesses which might be available in a public communications network. Under all circumstances, the signaling signals are no longer transmitted solely within the private network.

Accordingly, Applicant respectfully submits that independent claim 1, as well as dependent claims 2-8, should be allowable because the cited references do not teach or suggest all of the features of the claims, and one of ordinary skill in the art would not have been motivated combine and modify the cited references to produce the claimed invention.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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